

## United States Court of Appeals for the Federal Circuit

02-1509

IN RE JACK RICHARD SIMPSON

### JUDGMENT

ON APPEAL from the

UNITED STATES PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

in Case NO(S).

09/054,564

This CAUSE having been heard and considered, it is

ORDERED and ADJUDGED:

REVERSE AND REMAND

ENTERED BY ORDER OF THE COURT

**DATED** APR - 4 2003

Jan Horbaly, Clerk

ISSUED AS A MANDATE: MAY 27, 2003

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FOR THE FEDERAL CIRCUIT

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NOTE: Pursuant to Fed. Cir. R. 47.6, this disposition is not citable as precedent. It is a public record. The disposition U.S. PATENT & TRADEANAN CONTROL will appear in tables published periodically.

# United States Court of Appeals for the Federal Circuit

02-1509 (Serial No. 09/054,564)

IN RE JACK RICHARD SIMPSON DECIDED: April 4, 2003

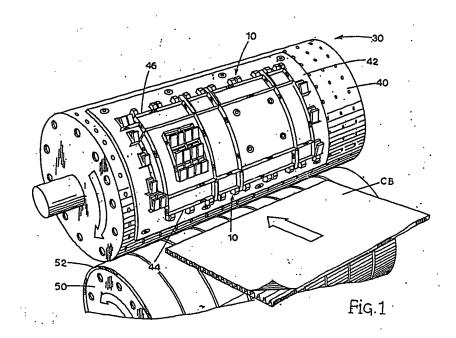
Before LOURIE, SCHALL, and PROST, Circuit Judges. LOURIE, Circuit Judge.

#### DECISION

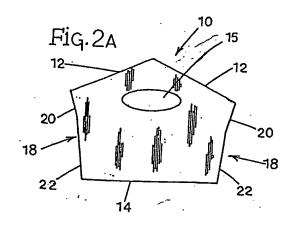
Jack Richard Simpson appeals from the decision of the United States Patent and Trademark Office ("PTO") Board of Patent Appeals and Interferences holding that claims 1, 3, 5, 8, 9, 28, and 29 of his patent application are unpatentable as being anticipated under 35 U.S.C. § 102. Ex parte Simpson, Appeal No. 2001-0312, Paper No. 16 (B.P.A.I. May 22, 2002). Because the Board's claim construction is incorrect, we reverse and remand.

#### BACKGROUND

On March 3, 1998, Mr. Simpson filed U.S. Patent Application 09/054,564 entitled "Trim Edge Stripper for a Corrugated Board Rotary Cutting Die." The invention is a part of a machine for cutting a piece of corrugated board such as cardboard as it passes between two rotating cylinders, as shown in Figure 1 of the application, reproduced below:

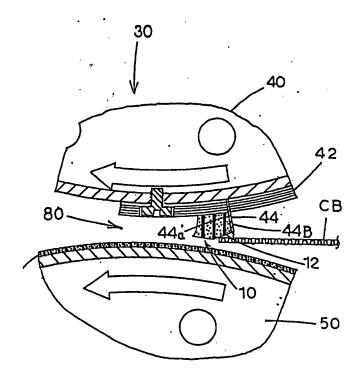


As a corrugated board **CB** passes between rotating cylinders **40** and **50**, the board **CB** is cut by blades, such as a leading trim blade **44** and a trailing trim blade **46**. As the board **CB** exits from the other side of the machine, "trim" is cast away from the desired portion of the board **CB** by action of trim strippers **10**. An embodiment of the trim stripper **10** is illustrated in the application's Figure 2A, reproduced below:



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The trim stripper 10 is formed of a resilient material and has angled outer surfaces 12. The trim stripper 10 is dimensioned such that its maximum height in the center exceeds the height of the trim blade (e.g., leading trim blade 44 or trailing trim blade 46) to which it is adjacent. Such an arrangement is illustrated in the application's Figure 4B, shown below:



As a "trim" portion of the board **CB** comes between the cylinders **40** and **50**, it is engaged by one of the angled outer surfaces **12** of the trim stripper **10**, which compresses as it passes between the cylinders **40** and **50**. As the cylinders **40** and **50** continue to rotate, the trim stripper **10** expands to its quiescent shape, thereby pushing the "trim" portion away.

Simpson's application contains two independent claims that are focused on in this appeal: apparatus claim 1 and method claim 28, which read as follows (with emphases added):

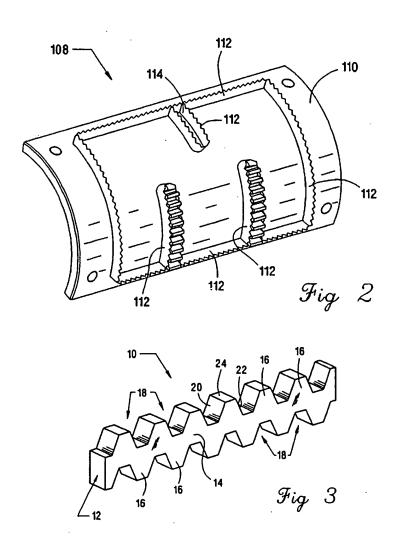
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- 1. A rotary cutting die for cutting corrugated board and trimming <u>an</u> <u>outside trim piece</u> from the corrugated board so as to yield a product portion comprising:
  - (a) a base adapted to be mounted to a rotary cylinder;
  - (b) <u>at least one trim cutting blade</u> secured to the base and extending outwardly therefrom for trimming <u>an outside trim piece</u> from a sheet of corrugated board; and
  - (c) at least one trim stripper mounted outside the trim cutting blade for engaging the trim piece and stripping the trim piece from the product portion, the trim stripper including an angled outer stripper surface that is angled outwardly and away from the trim blade in such a fashion that at least a portion of the angled outer stripper surface extends outwardly past the height of the trim blade.
- 28. A method of controlling and managing <u>an outside trim piece</u> cut from a sheet of corrugated board passing between a rotary cutting die and a rotating anvil comprising:
  - (a) directing the sheet of corrugated board between the rotary cutting die and the rotating anvil;
  - (b) engaging an outside trim edge portion of the sheet with an angled outer surface of a trim stripper carried by the cutting die and disposed outside a trim blade; and
  - (c) cutting the outside trim edge portion of the corrugated board sheet with the trim blade while compressing the trim stripper between the cutting die and the trim edge portion being cut as the corrugated board passes between the cutting die and the anvil; and
  - (d) releasing the trim stripper as the trim stripper and cut trim edge portion pass through a nip defined between the anvil and the cutting die causing the angled outer surface of the trim stripper to expand outwardly and engage the cut trim edge portion and strip the cut trim edge portion from the trim blade.

The Board affirmed an Examiner's rejection of those claims, and claims 3, 5, 8, 9, and 29 depending therefrom, under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 5,636,559, issued jointly to Smithwick and Simpson, the inventor of the '564

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application on appeal. The prior art '559 patent (hereinafter "Smithwick") discloses a similar machine for cutting a piece of corrugated board as it passes between two rotating cylinders. Much like the "trim cutting blades" in the claims at issue, Smithwick employs cutting rules 112. As shown in Smithwick's Figure 2 (shown below together with Figure 3), Smithwick discloses cutting rules 112 arranged to cut the outer perimeter of a corrugated board in a rectangular shape. Smithwick also discloses a U-shaped cutting rule 112 that is used to produce a slot in the corrugated board. The U-shaped cutting rule 112 defines a cavity or recess 114. It is in the recess 114 — and only in that area — where Smithwick places a scrap ejector 10, illustrated below:



The scrap ejector 10 comprises an elongated body 12 having alternating lugs 16 and notches 18 along both its top and bottom. Each lug 16 has side walls 20 and 22 as well as an outer contact face 24. Like the "trim stripper" in the claims at issue, Smithwick's scrap ejector 10 is made of a resilient material and has a top-to-bottom height that exceeds the height of the cutting rules 112.

In reading claim 1 upon Smithwick, the Board reasoned that the slot scrap cut from the area corresponding to the recess 114 is an "outside trim piece":

[C]laim 1 does not provide any reference for defining which side of the blade is the outside. In any event, in that scrap ejectors 10 are disposed on the sides of the U-shaped cutting rules 112 which fall outside of the area defining the final product (a rectangular board having slots cut therein), each of the scrap ejectors 10 is mounted outside a trim cutting blade (U-shaped cutting rule) as called for in the claim. As for appellant's contention that the strip scrap cut from the board to form a slot is not an "outside trim piece," we perceive nothing in the strip scrap removed by the scrap ejector 10 of Smithwick which distinguishes it from an "outside trim piece" (i.e., a piece of material which is trimmed off the board from an exterior edge thereof.).

Simpson, slip op. at 4-5. In affirming the rejection of method claim 28, the Board apparently interpreted the phrase "outside trim edge portion" to mean the same thing as "outside trim piece" in claim 1. See id. at 6. The Board also explained how each step of claim 28 reads on Smithwick, including the "engaging step," in regard to which it simply stated: "Smithwick discloses . . . engaging a strip scrap with a scrap ejector 10." Id.

Simpson has appealed, and we have jurisdiction pursuant to 28 U.S.C. § 1295(a)(4)(A) and 35 U.S.C. § 141.

#### DISCUSSION

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A determination that a claim is anticipated under 35 U.S.C. § 102 involves two analytical steps. First, the Board must interpret the claim language, where necessary. Because the PTO is charged with giving claims their broadest reasonable interpretation, our review of the Board's claim construction is limited to determining simply whether it was reasonable. In re Morris, 127 F.3d 1048, 1055, 44 USPQ2d 1023, 1028-29 (Fed. Cir. 1997). Secondly, the Board must compare the claim, as so construed, to a prior art reference and make factual findings that "each and every limitation is found either expressly or inherently in [that] single prior art reference." Celeritas Techs. Ltd. v. Rockwell Int'l Corp., 150 F.3d 1354, 1360, 47 USPQ2d 1516, 1522 (Fed. Cir. 1998). We review those factual findings for substantial evidence. See In re Gartside, 203 F.3d 1305, 1315, 53 USPQ2d 1769, 1776 (Fed. Cir. 2000) (holding that factual determinations underlying an obviousness rejection under 35 U.S.C. § 103 are reviewed for substantial evidence). Substantial evidence is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion," id. at 1312, 53 USPQ2d at 1773 (quoting Consol. Edison Co. v. NLRB, 305 U.S. 197, 229-30 (1938)), and "the possibility of drawing two inconsistent conclusions from the evidence does not prevent an administrative agency's finding from being supported by substantial evidence," id. (quoting Consolo v. Fed. Maritime Comm'n, 383 U.S. 607, 620 (1966)).

Simpson first argues with regard to claim 1 that the Board failed to explicitly interpret the word "trim" and that any implicit interpretation in the Board's analysis is unreasonable. According to Simpson, "trim" refers to "an outer edge portion cut from the initial corrugated board **CB**." Simpson contends that the definition he proffers is the art-recognized meaning of that word, is consistent with the patent specification, and is

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the meaning confirmed by statements in the prosecution history to date. Simpson secondly argues that the Board's interpretation of "outside" is unreasonable because it fails to give effect to the meaning of that word, and that under the term's ordinary meaning ("beyond an enclosure or boundary, or on or toward the outer side or surface"), Smithwick's scrap ejector 10 is mounted inside, not outside, the cutting rules 112. On the basis of the words "trim" and "outside," Simpson further challenges the Board's anticipation analysis concerning the phrases "trim cutting blade" and "trim stripper" in claim 1. With regard to claim 28's recitation of "an outside trim edge portion," Simpson reiterates the same claim construction arguments. Further, Simpson contends that the Board did not present any evidence that Smithwick discloses the limitation expressed in the "engaging" step that "an angled outer surface of a trim stripper" is the part of the trim stripper that engages the trim. According to Simpson, Smithwick's scrap ejector's outer flat surface 24 — not the angled surface 20 or 22 — engages scrap.

The PTO first responds that the word "trim" should be interpreted to mean "any piece of unwanted (non-product) material that is cut away from the final product," and that such a construction is reasonable. According to the PTO, Simpson's specification does not provide a definition of "trim," Simpson has not provided evidence to substantiate his allegations regarding the art-recognized meaning of that word, and Simpson's statements in the prosecution history are not entitled to weight while prosecution is still open. The PTO next responds that the Board's construction of "outside" as meaning any area of the corrugated board that is not part of the final product is reasonable. In response to Simpson's arguments regarding method claim

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28, the PTO's brief states that "[c]laim 28 is essentially the method for using the cutting die of claim 1" and simply echoes the Board's conclusion that Smithwick teaches the engaging step (b). During oral argument, however, the PTO presented a more detailed argument, contending that the curvature of the scrap ejector 10, when it is placed on the upper cylinder, results in an angled outer surface of the scrap ejector 10 engaging the corrugated board.

We agree with Simpson that Smithwick does not anticipate the claims. We need not decide between the parties' positions regarding the terms "trim" and "outside trim," for we find that the Board erred in construing and reading upon Smithwick the claim limitation that "at least one trim stripper [is] mounted outside the trim cutting blade." That phrase follows a recitation of "at least one cutting blade . . . for trimming an outside trim piece." The U-shaped portion of Smithwick's cutting rule 112 is a "trim cutting blade"; so are the outermost straight edge portions of Smithwick's cutting rule 112, i.e., the blades arranged in a large rectangle. The question then becomes whether Smithwick's scrap ejector 10 is mounted "outside" at least one of those cutting blades. To answer that question we must construe the word "outside." We do so in favor of Simpson because the Board's construction — any area that is not part of the final board - is simply incorrect in light of the normal meaning of the word "outside." For example, if a small circular cutting blade were arranged in the middle of the board area, so as to cut away a small hole in the center of the board, the interior of the circle would be "outside" the cutting blade, according to the Board's construction. Yet the interior of a circle is clearly not "outside" the circle's perimeter. Likewise, the recess 114 is not "outside" the U-shaped portion of Smithwick's cutting rule 112; on the contrary, the

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recess 114 is inside the "U." Moreover, the recess 114 is also inside, not outside, the rectangularly-arranged outermost straight edge portions of the cutting rule 112. Thus, because Smithwick's scrap ejector 10 is mounted in the recess 114, Smithwick fails to meet the claim limitation that "at least one trim stripper [is] mounted outside [at least one] trim cutting blade." We therefore reverse the Board's affirmance of the examiner's rejection of claim 1 and its dependent claims 3, 5, 8 and 9, which have not been argued separately, as well as claims 28 and 29, which contain the similar limitation that the "trim stripper [is] disposed outside a trim blade."

Because those limitations are dispositive of the entire appeal, we need not address the other issues raised by the parties.

#### CONCLUSION

Because the Board's affirmance of the § 102 rejection is premised on an incorrect claim interpretation, we reverse the rejection.

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UNITED STATES COURT OF APPEALS
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By: (1. January Date: 5/27/03